

Abstract

## Proton-conducting membrane and the use thereof

5       The present invention relates to a novel proton-conducting polymer membrane  
based on aromatic polyazoles which contain sulfonic acid groups and in which the  
sulfonic acid groups are covalently bound to the aromatic ring of the polymer and  
which can, owing to their excellent chemical and thermal properties, be used for a  
variety of purposes. Such materials are particularly useful for the production of  
10       polymer electrolyte membranes (PEMs) in PEM fuel cells.